USDA PERSPECTIVE ON THE OUTLOOK FOR COTTON

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The theme of this 77th Agricultural Outlook Forum, "Farm and Policy Prospects," seems appropriate as agriculture embarks on the 21st century under a new Administration. The policy debate on the shape of future cotton farm policy began with last week's hearings in the House of Representatives, and the discussion is influenced by a number of contradictions in the current cotton situation. World cotton consumption is estimated at record levels for both the past and present season but, after rebounding from 1999/2000's 25-year low, cotton prices have fallen in recent months. In the United States, consumers have continued to increase purchases of cotton products, yet domestic mill use of cotton is expected to reach a 9-year low in 2000/01. And, despite higher average market prices, farm income is likely to decline this season, due to a reduction in government payments which more than offsets the higher market returns. However, lower income levels have not dampened farmers' enthusiasm for cotton, and planted area is forecast to rise this spring.

As planting time approaches once again, 2001 is shaping up to be another intriguing year for cotton. But before addressing the upcoming 2001/02 season, a brief review of the latest 2000/01 supply and demand estimates in the United States and abroad is presented.

2000/01 World Cotton Situation

The world cotton situation for 2000/01 is characterized by larger production that is more than offset by higher consumption and as a result, ending stocks are reduced further to their lowest level in 5 years. Record world yields are expected to increase global output 1 percent to 88.1 million bales. However, the continued strength of world cotton consumption—estimated at 92.1 million bales—is forecast to push world stocks 9 percent, or 3.7 million bales lower. World prices have responded as the A-Index has risen 10 cents thus far this season, compared with the 1999/2000 marketing year average.

2000/01 U.S. Cotton Situation

U.S. Area, Yield, and Production

As planting time approached for the 2000 crop, cotton prices were slightly better than the previous year. However, prices for competing crops—like corn and soybeans—were also above year-earlier levels but did little to attract area away from cotton. And in the end, the cotton marketing loan program—which supplied a significant portion of cotton producers' incomes in 1999—and the insurance program available to producers provided the incentive for U.S. farmers to plant additional area to cotton in 2000.

The flexibility provisions and favorable springtime weather allowed producers to plant more than 15.5 million acres this season, 4.5 percent above 1999 and the highest since 1995. Upland area in 2000 was near 15.4 million acres, up from 14.6 million a year ago. In contrast, extra-long staple (ELS) area declined substantially to 172,000 acres, a 40-percent drop in acreage from 1999. Last season's record yield provided an ELS crop well above demand and more than doubled stocks, creating the incentive to move some ELS area into upland in 2000. But despite the increase in total area in 2000, the national average abandonment rate was well above last season at nearly 16 percent, or 2.4 million acres. With the higher abandonment, harvested area, at 13.1 million acres, was below that of 1999.

U.S. cotton production in 2000/01 is estimated at 17.2 million bales, slightly above last season's 17.0 million. With the smaller harvested area this season, the production gain is attributable to a rebound in the national average yield. The U.S. cotton yield is estimated at 631 pounds per harvested acre, 24 pounds above last season but below the 10-year average of 644 pounds.

Upland production for 2000 is currently estimated at 16.8 million bales, with the average yield estimated at 625 pounds per harvested acre, both above last season. While expected production is higher in all regions this season except the Southwest, yields were mixed as drought conditions across parts of the Cottonbelt once again affected

output. ELS production is forecast at 398,000 bales, 40 percent below 1999. The decline in the ELS crop is attributable to lower acreage, as yields were similar. The ELS yield is estimated at 1,119 pounds per harvested acre, below only the record of 1,128 pounds in 1999.

U.S. Mill Use and Exports

The 2000/01 demand outlook points to a decline in total U.S. cotton offtake from last season. Total demand is projected at 16.7 million bales, 2 percent below 1999/2000 and about 4 percent below the 5-year average. The decrease in this season's demand prospects is attributable to lower mill use as exports are forecast above a year ago. U.S. cotton mill consumption is projected to fall 5 percent this season to the lowest level in 9 years. The latest estimate places 2000/01 mill use at 9.7 million bales, 500,000 bales below last season. The continued growth of U.S. textile and apparel imports has placed tremendous pressure on the U.S. spinning industry over the last several years and continues this season. At the same time, a weakening of the economy has stifled growth in retail cotton consumption, exacerbating the effects of competition from textile imports. As a result, some mills have been forced to limit output, relocate, or close altogether. Upland mill use in 2000/01 is currently projected at approximately 9.6 million bales, while ELS consumption is expected to reach 130,000 bales.

Based on the first 5 months of data from the Department of Commerce, the seasonally adjusted annual rate of cotton consumption averaged nearly 9.7 million bales. Actual cotton mill use for August through December 2000 reached 3.97 million bales, compared with 4.21 million a year earlier. Cotton use has declined 6 percent, while manmade fiber use on the cotton system has fallen 9 percent during the comparable period as growth in consumer demand for all fibers has slowed. As a result, cotton's share of fiber use on the cotton system has risen above that of last season. During the first 5 months of 2000/01, cotton's share averaged 79.2 percent, compared with 1999/2000's 78.4 percent.

Aiding both cotton consumption and share is the continued success of U.S. cotton textile exports that is associated with regional trade agreements like NAFTA and CBI. For calendar 2000, cotton textile exports rose for the 17th consecutive year, reaching 5.1 million bale-equivalents (2.4 billion pounds), nearly 18 percent above 1999. At the same time, however, the strong U.S. dollar contributed to the expansion in cotton textile imports that totaled 15.8 million bale-equivalents (7.6 billion pounds) in 2000, 13 percent above 1999. With textile imports rising more than exports, the 2000 cotton textile trade deficit continued its 6-year expansion. The deficit approached the equivalent of 10.8 million bales of raw cotton, nearly double the 1993 level. Meanwhile, total domestic cotton consumption (mill use plus net textile trade) advanced for 4th consecutive year, with per capita consumption increasing from 1999's 35 pounds to 36 pounds in 2000. However, slightly less than half of this total is being produced in U.S. mills.

Meanwhile, U.S. exports are projected to continue their rebound this season from 1998/99's decade-low shipments. Exports are now projected at 7 million bales, 3 percent above 1999/2000 but below early-season expectations. Upland exports are expected to account for most of the gain, rising to more than 6.5 million, and ELS shipments are forecast to rise slightly to 460,000 bales, near the 1996 record. However, total commitments (shipments plus outstanding sales) for 2000/01 are lagging the pace set last season. Upland commitments through early February were 5.2 million bales, compared with 5.9 million in 1999/2000. On the other hand, ELS commitments and shipments are running ahead of last season's pace.

A number of factors have contributed to the sluggish pace of U.S. export sales thus far this season. Foreign cotton consumption is projected to rise slightly from last year's level, with significant increases forecast for China, Brazil, and Russia. China's restrictive import policy, Brazil's larger production, and Russia's proximity to the cotton-producing countries of Central Asia restrict the U.S. share of these markets. At the same time, consumption is forecast to decline in several importing countries that traditionally are customers of U.S. cotton, especially Turkey, Taiwan, Mexico, and Korea.

In addition to the geographic shift in consumption patterns, concerns about textile demand—especially in the large U.S. retail market—has made foreign mills more cautious about acquiring inventories of raw materials, and prospects for large Southern Hemisphere crops have encouraged hand-to-mouth buying. Also, the strong U.S. dollar has given Australian cotton, which can be hedged on the New York futures market and then sold in the weaker Australian currency, a definite competitive edge. Despite these factors, the U.S. share of the global export market is projected to grow for the second consecutive year this season to 26 percent, up from 25 percent in 1999/2000 and 18 percent in 1998/99.

U.S. Supply, Stocks and Farm Income

U.S. cotton supplies at the beginning of 2000/01 were 3.9 million bales, nearly identical to the previous three seasons. Also similar to 1999/2000, U.S. supplies are once again expected to include only a small quantity of imported cotton. During the first 5 months of this season, imports have reached only 8,000 bales, with the majority ELS cotton from Egypt. Raw cotton imports are projected at only 30,000 bales for the season, below the 97,000 bales imported in 1999/2000. Including imports, total U.S. cotton supply in 2000/01 is projected at 21.2 million bales, marginally above last season.

Based on these projections of U.S. cotton supply and demand, ending stocks for the 2000/01 season are estimated at 4.5 million bales, the largest since 1992/93. With U.S. stocks anticipated to jump nearly 600,000 bales from the beginning level, the ratio of stocks-to-use is projected at 26.9 percent, compared with the previous 5-year average of 21.3 percent. While upland stocks are expected to leap to 4.4 million bales this season, ELS stocks are projected to drop dramatically due to the substantial reduction in both area and production.

While upland farm prices fell to a 25-year low in 1999/2000, upland gross farm income rose about 13 percent to $6.9 billion due to a sharp increase in government payments. Of total income, regular and supplemental AMTA payments together with marketing loan benefits totaled about $2.9 billion. On a per-acre basis, market returns were barely sufficient to cover 1999-crop variable costs, but government payments raised the average net return to an estimated $203 per acre. Returns from the market have risen with higher prices in 2000/01 but, at the same time, lower levels of government support have reduced total producer returns. Gross farm income for the 2000 crop is estimated at $6.6 billion, including government payments of $1.6 billion. Net returns over variable costs are estimated at $142 per planted acre, down about 30 percent.

2000/01 Foreign Cotton Situation

Foreign Area, Yield, and Production

Foreign production rose less than 1 percent from the year before in 2000/01, a 600,000-bale gain to 70.8 million bales. A substantial gain in China's production, and larger crops in Brazil, Argentina, Paraguay, and Syria were just about offset by smaller crops in Uzbekistan, West Africa's Franc Zone, India, Pakistan, and Mexico.

After falling below 19 million bales for the first time since 1993, China's production rebounded in 2000/01, climbing 2.4 million bales from the year before to 20 million bales. While the final assessment of the crop by China's National Bureau of Statistics is still months away, current information suggests both area and yields rose during 2000/01. Procurement prices rose steadily during the latter half of China's 1999/2000 marketing year and agricultural policies detrimental to enthusiasm for grain production in China were announced. The availability of genetically engineered cotton also permitted some eastern regions previously devastated by bollworm infestations to begin returning to the cultivation of cotton. China's cotton area in 2000/01 is estimated at 4 million hectares, 300,000 hectares above its 1999/2000 level, but nonetheless the second lowest since 1963, and 300,000 below the average of the preceding 3 years. Yields however were a record high, 6 percent above the year before, and 65 percent higher than in 1992 when the bollworm's impact on China's output was at its height.

Southern Hemisphere production finally surpassed its 1990/91 record 9.1 million bales in 2000/01, jumping 1.9 million bales to 10 million as a number of countries responded to rebounding prices. While Northern Hemisphere planting decisions for 2000/01 came shortly after cotton prices hit 25-year lows, Southern Hemisphere producers were able to respond to the opportunities presented by a 37-percent increase in the A-Index between December 1999 and May 2000. Thus, while Mexico's crop declined nearly 300,000 bales, Latin America's total production rose nearly 900,000 bales due to larger crops in South America.

Paraguay and Argentina are estimated to have increased output by about 200,000 and 300,000 bales, respectively, compared with the year before in 2000/01, but the largest gain is forecast for Brazil. Brazil's output in 2000/01 is estimated 600,000 bales higher than the year before, and at 3.7 million bales is estimated to be its highest since 1984/85. Brazil's cotton output has increased 188 percent since 1996 as Brazil made the transition from declining hand-picked harvests in Parana and Sao Paulo during the first half of the decade to a surge in the mechanized crops of Mato Grosso and northern Bahia since 1996. Brazil's total cotton area is currently well below its earlier levels, but extremely favorable conditions in the new producing regions means Brazil's average yield has soared 120 percent since 1996.

In contrast with South America, cotton producers in West Africa's Franc Zone suffered perhaps their biggest setback ever in 2000/01, as production fell nearly 600,000 bales. Several years of low prices have hampered the ability of the region's parastatals to provide the region's farmers with farm inputs and timely payments for crops. Area fell more

than 300,000 hectares to a four-year low, and output fell for the third consecutive year.

In Central Asia, 2000/01 output fell more than 900,000 bales from the year before, largely due to weather. Yields fell to post-Soviet-era lows as several years of regional drought hampered irrigation and then late-season torrential rains hit Uzbekistan. Pakistan also suffered from reduced irrigation supplies, and output is estimated down 500,000 bales to 8.1 million bales.

Weather also helped reduce India's crop in 2000/01 as a poor monsoon reduced plantings and yields in Gujurat even below 1999/2000's reduced levels. Cotton prices in India declined during 1999/2000, further reducing India's cotton area, down nearly 500,000 hectares to 8.3 million hectares, its lowest in 6 years. India's cotton production declined about 700,000 bales to 11.5 million.

Foreign Consumption, Trade, and Stocks

Foreign consumption in 2000/01 is forecast at 82.4 million bales, up 1 percent from the previous year for back-to-back records in foreign use. The strong (9 percent) consumption increase in 1999/2000 was fueled by low prices and a red-hot world economy, but also increased inventories of yarn and textiles. These inventories, coupled with rising cotton prices and slower economic growth in 2001, helped moderate consumption growth in 2000/01. Consumption in China is forecast at 23 million bales and is also a record. However, total consumption in all other foreign countries is forecast virtually unchanged from 1999/2000.

Consumption within the other foreign countries shows great variability. Brazil and Argentina have shown strong growth in consumption due both to improving economic conditions and large local crops. Consumption in the NIS grew by 10 percent helped by economic growth in Russia and other former Soviet Republics. Pakistan and Bangladesh are also forecast to increase consumption in 2000/01.

In contrast, consumption declines in Turkey and Mexico are expected in 2000/01 following large increases in 1999/2000. Continued declining consumption is forecast in higher income Asian countries; Korea is forecast down 9 percent, Japan down 10 percent, and Taiwan down 12 percent. Also, consumption in India has suffered from a slowing world economy and increased textile export competition.

China, the world's largest producer and spinner of cotton has pursued a policy of price liberalization, coupled with aggressive stocks disposal since August 1999. Procurement prices fell sharply for the 1999 crop, and production responded accordingly, dropping 15 percent or about 4 million bales, from the preceding year. Concurrent with reduced production, consumption benefited both from lower cotton prices, which competed favorably with higher synthetic prices, and from a recovery in world textile demand—China's cotton consumption rose nearly 16 percent in 1999/2000. The government of China also subsidized exports and limited imports last marketing year, with the result that ending stocks fell a staggering 6 million bales to about 15 million.

China's stocks are projected to be reduced further in 2000/01, the second year of the reform program, but the magnitude of the reduction will be more constrained. The latest official government estimates suggest that 2000-crop production has recovered, rising about 14 percent from 1999, due to higher cotton prices in combination with lower grain prices in the spring of 2000. Consumption is forecast to continue to outstrip production, but the consumption increase is projected at a more modest 3.6 percent, reflecting slower growth in demand for Chinese textile exports. Continued restrictions on imports are likely to hold the season total to about 500,000 bales; this policy has the advantage of allowing the government to sell its accumulated surpluses for domestic use and the disadvantage of raising China's internal prices well above world market-clearing levels. Higher internal prices and the elimination of export subsidies have hurt China's export prospects and shipments are projected at only 700,000 bales, down 1 million from 1999/2000.

While world ending stocks for 2000/01 are projected down 3.7 million bales to 37.3 million, the lowest level in 5 years, foreign stocks are forecast down 4.3 million bales to 32.8 million, the lowest in 6 years, with most of the decrease is occurring in China. China's ending stocks of 11.8 million bales are down over 20 percent from the previous year. India and Pakistan also saw stocks fall as lower domestic production tightened those markets. Decreased production in the producing former Soviet Republics also tightened stocks in those export-driven markets. However, some increases in ending stocks are also seen, primarily in producing countries that had large production gains--Brazil, Paraguay, and Syria.

2001/02 World Cotton Outlook

The preliminary outlook for the world in 2001/02 suggests higher area, production, and consumption, with world ending stocks near the beginning level. World price performance of cotton has been relatively favorable—average world prices (U.S. Gulf ports) for wheat, corn, and soybeans during the 3 months ending January 2001 have surpassed year-earlier levels by 24, 8, and 6 percent, respectively. The comparable gain for cotton's A-Index was 41 percent. Global production is projected at 93 million bales. Although world consumption could be limited by the slower rates of world economic growth forecast for 2001 and 2002, world mill use is projected to equal production at 93 million bales. World trade is expected to rise primarily in response to the higher projected import demand by China.

2001/02 Foreign Cotton Outlook

Foreign Area, Yield, and Production

After falling for 2 years, foreign cotton area seems likely to rebound in 2001/02, rising more than 1 million hectares, and returning to the 28-million-hectare level it achieved on average during the 1990's. Gains in China, India, Uzbekistan, the Franc Zone, and Brazil are expected to contribute to the increase. With higher area in most major foreign producing countries likely, foreign production could rise 3 million bales to about 74 million in 2001/02. At this level, foreign production would be its largest since 1995/96.

China's cotton prices have continued to drift upward during the 2000/01 marketing year to date, with widespread reports of private dealers procuring cotton outside of the Supply and Marketing Cooperatives system at prices well above last year. Grain prices have improved as well, but official policy is still to discourage low quality grain production, and winter wheat area this year fell by 10 percent, based on various reports. During 2000/01, the opportunity to use Bt cotton reportedly contributed to large cotton area increases in eastern China, and further gains are expected in provinces that saw their cotton area plummet during the early 1990's due to bollworm infestations. In western China, authorities in Xinjiang are reportedly not pursuing efforts to reduce cotton area. Press reports from China have indicated that farmers are indeed planning to increase cotton area at the expense of grain in the east, and an increase in total national area seems likely. While it is difficult to forecast yet another year of record yields, the increased use of Bt cotton suggests that yields will remain near recent records. China's cotton production would therefore be expected to increase in 2001/02 compared with 2000/01's 20 million bales.

In India, cotton prices have risen during 2000/01 for the first time in 3 years, and grain prices have been weakening. Price alone should bring more area into cotton during 2001/02, and more normal weather could further increase area in Gujurat, where a late monsoon reduced plantings last season. Normal weather would also assure that while yields might fall compared with 2000/01, they should at least approximate a 3-year average and production could rise as much as 1 million bales.

Pakistan's area is likely to rise in part due to expected continued short irrigation supplies, as farmers may shift some area from rice to cotton to reduce water use. Several years of below normal precipitation affected production in 2000/01, and the shortfall has not been made up in the last year. Pakistan's cotton yields have been unusually high during the last 2 years, in part reflecting unusually dry weather at the end of the season, and possibly some shifts to new varieties. Little change is likely for Pakistan's production in 2001/02 as a return to more normal yields and rising area proves about offsetting.

Difficulties with irrigation supplies are also expected to continue to affect Uzbekistan's production, but higher yields than 2000/01 are likely there in the coming year assuming a return to normal late-season weather. Uzbekistan's government has reported plans for a slight increase in total area, up 15,000 hectares to 1.435 million, and with improved yields, production there could increase several 100,000 bales.

A similar increase seems in order for producers in West Africa's Franc Zone. Production there fell steeply in 2000/01 due to a combination of poor weather and the cumulative effect of several years of falling prices. The system of input procurement and cotton marketing through parastatal corporations serves to delay some of the impact of world cotton price changes on production in the region; on the other hand, the late planting dates for these equatorial countries may provide a sufficient lag for this season's price gains to lead to increased area in 2001/02.

In the Southern Hemisphere, Brazil's Mato Grosso is likely to continue to expand, increasing both Brazil's area and national average yield, and bringing production up towards the 4 million-bale-level last seen in the mid-1980's. Higher area is likely in Argentina, assuming weather permits intended plantings to occur, and Australia is likely to continue its long-standing trend of increasing its cotton area given sufficient irrigation supplies.

The improvement in cotton prices that began in November 1999 (albeit, with occasional setbacks) is expected to increase efforts to produce cotton across a variety of smaller countries as well. It is difficult to forecast any significant declines to offset the increases expected in China, India, the Franc Zone, and the Southern Hemisphere. Industry reports from Turkey suggest lower area is possible there in 2001/02 following that country's economic crisis and proposed lower government payments, but it remains to be seen if Turkey will in fact reduce its production for the third consecutive year.

Foreign Consumption, Trade, and Stocks

With projected world GDP growth in 2001 and 2002 of 3.1 and 3.6 percent, respectively, world mill use in 2001/02 is projected to be the third consecutive record, something that has not happened since the late 1980's, before the breakup of the Soviet Union and the Asian crises. Also supporting the rise in consumption is the current relationship of cotton prices to those of manmade fibers. Total foreign use is also projected to increase to a record of 83.5 million bales, an increase of over 1 million bales from 2000/01.

Consumption in China is expected to account for half of the gain in foreign consumption, with an increase of more than 2 percent to about 23.5 million bales, based on strong GDP growth, larger textile exports and increased domestic demand. Russia's consumption growth is also likely to maintain its momentum during 2001/02, as higher oil prices have improved export earnings and the late-1998 exchange rate shock continues to improve the net trade position of several industries, including textiles. More restrained growth is anticipated for Brazil, India, Mexico, Indonesia, Pakistan and Turkey. Partially offsetting these increases are modest declines forecast for the developed Asian cotton-importing countries, such as Japan, Korea, and Taiwan. High labor costs and strong competition from China are likely to continue to erode cotton spinning in these countries.

Turning to foreign trade, import demand is likely to rise in 2001/02 compared with 2000/01, largely because of China. At 28 to 29 million bales, foreign imports are expected to rebound to their 1996/97 level, about 1.5 million bales above 2000/01 imports. Imports are expected to account for a higher share of world consumption in 2001/02, about 31 percent compared with about 29 percent in 2000/01. Global textile capacity has been shifting away from steady importers like Russia and Japan to cotton producing countries like India, China, and Brazil. Thus, the imported share of world cotton consumption has tended to decline, averaging 34 percent in the first half of the 1990's, and 31 percent during the second half. In 2001/02, the continued recovery in Russia's textile industries and a shortage of higher quality cotton in China mean the next marketing year could deviate from that longer term trend.

Projections for China's supply and demand, and especially for China's net trade, are key variables affecting the world and U.S. outlook for 2001/02; yet, these projections are highly uncertain. In addition to the usual volatility of weather, demand, and other economic factors, China is likely to join the WTO sometime during the 2001/02 marketing year. The terms of accession include the opening of a tariff rate quota (TRQ) of about 4.1 million bales of raw cotton in calendar 2001, of which two-thirds is reserved for non-State trading enterprises. Such a large import quota, if implemented as envisioned in the WTO agreement, could materially change the outlook. However, because of the many uncertainties affecting both the timing of the accession and the establishment and allocation of the TRQ, USDA will follow its customary procedure of basing its official estimates on existing policy and will not incorporate WTO effects until such time as China formally accedes.

Projections for China in 2001/02 indicate a further shortfall of production relative to consumption of 2-3 million bales. Even without the requirements imposed by WTO membership, it will become increasingly difficult to fill this gap entirely from old-crop stocks, due to quality and circulation issues. The government of China has auctioned more than 8.5 million bales of stocks since the reforms were first implemented in September 1999, and the evidence suggests that the better quality stocks were sold first. As the surplus stocks are reduced, it is likely to be increasingly difficult to meet mill demand for higher qualities. In addition, China continues to struggle with problems in the circulation system, including logistical, legal and financial problems, which impede the movement of cotton from the far-Western Xinjiang region to the mills in the east. To some extent, the government's auction program has addressed these circulation difficulties by moving old-crop cotton into position for sale and then serving as a relatively reliable supplier. As China's mills become more dependent on current-crop production, the old circulation problems are likely to resurface and the mills may respond by demanding access to foreign supplies.

For these reasons, the government will come under increased pressure to expand existing quotas, especially if WTO accession is delayed. Imports of 2 million bales are projected for 2001/02; at the same, time exports are projected to decline slightly to about 500,000 bales. The net effect would be to reduce China's stocks to 10.8 million bales, or about 46 percent of total use.

Imports by foreign countries outside China are likely to follow consumption trends and the patterns established in 2000/01. India's imports of high-quality cotton by export-oriented mills have become an integral part of her supply and demand balance. With little or no increase in production and a recovery in textile activity, Turkey's imports are likely to rise. For the rest of the world, little net change is likely as possible gains in South and Southeast Asia are offset by possible continued declines in East Asia and the European Union. Lower imports are likely once more for Brazil, which has seen imports fall by 1.2 million bales during 1996-2000 as production rebounded.

With regard to the major foreign exporting countries, higher exports are likely from Central Asia and the African Franc Zone. In Central Asia, however, export supplies will be partially constrained by growth in the domestic textile industries, which have been supported by government transfers of resources from agriculture to industry through farm pricing policies and exchange rate policies. Reports of further investment in textile capacity in Central Asia have occurred regularly over the last year and further increases in consumption are expected in 2001. And, in both Central Asia and the African Franc Zone, export growth will be somewhat constrained by the need to rebuild stocks. At the same time, relatively tight supplies are expected to reduce exports from China, Egypt, and Pakistan.

With world production in 2001/02 expected to reach the level of consumption for the first time in 4 years, world ending stocks are forecast unchanged at 37.3 million bales, remaining at their lowest level since 1995/96. A projected increase in U.S. stocks is forecast to nearly offset a reduction of 1.0 million bales in China's stocks, implying only marginal gains in other foreign countries' stocks in 2001/02.

2001/02 U.S. Cotton Outlook

U.S. Area, Yield, and Production

Planted acreage in 2001 will be influenced by many factors including planting flexibility, price prospects for alternative crops, weather during planting, the cotton marketing loan program, and the numerous insurance options available to producers. Price ratios based on harvest time futures for corn vs. cotton and soybeans vs. cotton indicate that relative prices have changed little compared with this time last year. As a result, analysis based solely on expected market returns would suggest that cotton area should be similar to last season. Consequently, other non-price factors will help determine area in 2001.

Anecdotal information suggests that cotton acreage will equal or exceed last year's area in each region of the Cotton Belt. The marketing loan program continues to provide a safety net for cotton producers and recent changes in the crop insurance program have improved cotton's financial viability. The Agricultural Risk Protection Act of 2000 (ARPA) provides additional subsidies to reduce producer premiums, especially for the higher level "buy-up" insurance coverage. In some Southeastern and Delta counties, the producer's premium for 75-percent cotton insurance coverage will drop by 20 percent or more for the 2001 crop. In overall terms, the gain for cotton is greater than for the lower-cost, lower-risk grains and soybeans because the total cotton premium is higher and the subsidy is a flat percentage.

But of course, the question remains of what level of area to expect. The acreage survey recently published by the National Cotton Council suggests that cotton producers will increase acreage in 2001 by 2 percent. USDA is currently projecting 2001 cotton planted area at 16 million acres, 3 percent above 2000 plantings and the highest since 16.9 million acres were planted in 1995. The projection includes about 250,000 acres for ELS cotton, with the remaining area devoted to upland. The extent of cotton area increases will likely vary by region but will be based on expected net returns and producers' assessment of relative risk. While USDA is not forecasting regional cotton area at this time, a look at upland cotton area over the past decade shows some general trends in each region. Area that once moved westward returned to the Southeast and Delta regions. Additionally, the lack of viable alternatives in the Southwest and West regions during the past year or two has seen these regions rise once again.

While total cotton planted area is expected to rise in 2001, a return to a lower, more normal abandonment should keep harvested acreage well above that of the 2000/01 season. If the abandonment rate is near 9 percent during the upcoming season, harvested area based on the scenario presented here would total about 14.6 million acres, 11 percent above 2000/01. Yields, however, are projected to decline slightly in 2001 due to projected higher input costs—specifically fertilizer, fuel, and water—and the expected increase in marginal acres planted to cotton. The preliminary yield projection for 2001/02 is 625 pounds per harvested acre, which is about 20 pounds below the 10-year average but equal to the average over the last 10 years when area has exceeded 14 million acres.

Based on these acreage and yield assumptions, U.S. cotton production in 2001 would total 19 million bales,

approximately 10 percent above the 2000 crop. Coupled with the current beginning stock estimate of 4.5 million bales, total U.S. cotton supplies next season would reach 23.5 million bales, 2.3 million above 2000/01 and the highest U.S. cotton supply in 35 years.

U.S. Mill Use and Exports

U.S. cotton exports in 2001/02 are expected to continue to expand from the similar shipment levels recorded during the previous 2 seasons. The early projection for U.S. cotton exports during the upcoming season is 8.7 million bales, 24 percent above the 2000/01 estimate and the largest cotton shipments in 7 years. With the export forecast well above the 5-year average of 6.5 million bales, the forecast shipment level would represent a vast improvement in the U.S. share of world cotton trade from 26 percent in 2000/01 to more than 30 percent in 2001/02.

Exports will likely be boosted by plentiful U.S. supplies provided by increased production, by an anticipated decline in foreign stocks during 2000/01, and by increased foreign import demand in 2001/02, particularly from China. In addition, China's accession to the WTO in 2001/02 could expand U.S. export prospects further as the opening of additional import quotas would bode well for the United States, a historically large raw cotton supplier to China. As a result, U.S. cotton should be in a more favorable situation in 2001/02 to help supply the anticipated rise in world consumption. The United States will begin the 2001/02 season with 4.5 million bales of carryover, the highest since 1993/94, while several U.S. competitors' supplies will have declined.

Unlike exports, U.S. cotton mill consumption is projected to decrease from 2000/01, although the rate of decline may be smaller than that of the previous season. The preliminary estimate places U.S. mill use at 9.5 million bales, about 2 percent below the 2000/01 estimate. Along with a slower expected growth in U.S. GDP in 2001 and 2002, the continued gains in U.S. cotton textile and apparel imports is likely to result in lower mill use. In calendar 2000, cotton textile imports rose for the 12th consecutive year and could reach another record in 2001. Although U.S. retail cotton consumption could expand next season, the growth likely will be satisfied by imports.

Cotton textile trade will play an important role in shaping U.S. cotton demand in 2001 and beyond. Trade agreements, like NAFTA and CBI, have changed the landscape of U.S. textile trade and have forced structural changes in the U.S. textile and apparel sectors over the last several years. Since NAFTA's inception in 1994, more semi-processed products are exported to other North American countries, particularly Mexico, before returning to the United States as finished products. In 1993, for example, the United States exported the equivalent of just under 1 billion pounds of raw cotton in the form of textiles and apparel. At that time, NAFTA and CBI countries were the destination for 34 and 31 percent of the total, respectively, while Asian countries accounted for 14 percent. In 2000, U.S. cotton textile exports have climbed to a record 2.4 billion pounds; while the volume has changed dramatically, so have the shares. NAFTA now accounts for 53 percent of the U.S. cotton textile export market, compared with 35 percent for CBI, and 3 percent for Asia.

Likewise, a similar trend can be seen in U.S. cotton textile imports. In 1993, the United States imported the equivalent of 3.6 billion pounds of raw cotton in the form of textiles and apparel. NAFTA and CBI countries were the source for 6 and 12 percent of the total, respectively, while Asian countries contributed 65 percent. However, the changes in the U.S. textile industry that have promoted outward processing have also provided a dramatic shift in shares along with rising imports. In 2000, U.S. cotton textile imports achieved a record 7.6 billion pounds. While the volume of imports from Asian countries has risen, the share has fallen to 46 percent. In comparison, both volume and share have increased for NAFTA and CBI countries, accounting for 23 and 18 percent respectively.

As a result, the combined mill use and export projections are seen higher in 2001/02, with total demand for U.S. cotton projected to expand 9 percent to 18.2 million bales, the highest level since the 1997/98 marketing year. And, while U.S. production has been affected dramatically by weather during the last 2 seasons, this level of demand should be easily satisfied with only average acreage and yield in 2001/02. These two factors, of course, will play a major role in determining available supplies next season.

U.S. Supply, Stocks, and Farm Income

Although a return to more normal yields after two years of adverse weather would raise market income, the elimination of supplemental AMTA payments of about $600 million is likely to reduce farmers' overall returns. Preliminary estimates place gross farm income at $6.45 billion, down about 2.5 percent from 2000, and net returns over variable costs at about $115 per acre, compared with $142 estimated for the 2000 crop.

Based on the supply and demand scenario presented here, 2001/02 U.S. cotton supplies are forecast to reach 23.5

million bales, the largest since 1966/67. And, with 2001 U.S. cotton production projected in excess of the expanding demand, U.S. carryover stocks in 2001/02 would rise nearly 18 percent to 5.3 million bales, the largest ending stock level since 1988/89. This implies a relatively large stocks-to-use ratio of 29 percent, which reflects ample U.S. stocks to bridge the gap until new-crop cotton becomes available in the fall.

Summary

In summary, cotton will continue to compete with alternative crops for area here in the United States and abroad. Supply and demand changes, and the price response that these changes provide, will indicate the acreage planted in a given year. And once the fiber is produced, cotton will be competing with other fibers, like polyester, at domestic mills and on the world market in the form of raw fiber or cotton textile and apparel products. Growth in world demand will be the key to the continued success of U.S. cotton, with textile and apparel trade playing a significant role.

We would like to reiterate that the projections presented here are based on information and data as of February 2001. These projections will inevitably change as more information becomes available. The National Cotton Council recently provided a benchmark of farmers' intentions as of early January and NASS will provide the results of its upcoming *Prospective Plantings* survey at the end of March. While the Farm Act allows producers flexibility in determining cotton area, weather during the growing season will once again be a major influence on yield and ultimately how much cotton is actually produced.